

## **SHOE HEEL GUARD**

### **5 Field of the Invention**

The invention relates generally to the field of shoe protective accessory devices designed to prevent damage or wear to shoes during use. More particularly, the invention relates to such devices designed to protect the rear or heel of the shoe, and in particular to  
10 protect the rear or heel of a shoe during the act of driving a motor vehicle. Even more particularly, the invention relates to such devices which are only temporarily affixed to the shoe and which are quickly and easily attached and removed.

### **Background of the Invention**

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It is known in the prior art to provide protective devices to shoes in order to protect all or a portion of the shoe from damage, dirt, mud, water, etc. An area of the shoe very susceptible to damage is the rear or heel portion of the shoe, especially when the shoe is worn during driving. While operating the gas and brake pedal, the rear of the  
20 heel and the lower portion of the rear of the shoe contact the floor of the vehicle for long periods of time. The contacting portions will undergo rocking and sliding motions in the lateral and forward/backward directions. The rear portions will be scraped along the floor when the driver changes from the gas pedal to the brake and vice versa. Sand, gravel and other debris accumulates on the mat or carpet on the floor of the vehicle, and  
25 this particulate matter abrades the shoe, especially on any leather portions. Thus, it is

very common for shoes to be significantly scuffed, scratched, marred or otherwise damaged simply from the effects of driving a vehicle.

Various attempts have been made in the past to develop a heel protector to protect the rear of a shoe during driving. Some embodiments are strapped onto the shoe, while  
5 others are biased in some manner such that they snap onto the shoe. Still others utilize an adhesive to temporarily mount the heel protector onto the shoe. Examples of heel protectors or guards that are strapped or tied onto the shoe are shown in U.S. Patent No. 4,249,321 to Nagy, in which a hinged guard is held in place by a pair of crossed elastic, U.S. Patent No. 4,662,082 to Shabazz, in which a hard plastic guard shaped to receive the  
10 heel portion of a shoe is held in place by a single strap having plural snaps to allow for size adjustment, U.S. Patent No. 5,507,105 to Cancel, in which a guard with a height-adjustable panel is strapped to a shoe, and U.S. Patent No. 5,775,007 to Expose, in which plastic guard is held in place by a pair of straps with hook-and-loop type fasteners. Examples of biased heel guards are shown in U.S. Patent No. 1,571,466 to Barthes, in  
15 which a plastic guard is affixed to the shoe by a U-shaped spring member that laterally encircles the heel, U.S. Patent No. 3,025,617, which has a tubular sheath design adapted to fit women's high heeled shoes, U.S. Patent No. 3,095,659 to McClellan, in which a plastic guard is affixed to the shoe by a U-shaped spring member that laterally encircles the heel, U.S. Patent No. 3,851,412 to Voegele et al., in which plastic cups of various  
20 configurations dependent on the type of shoe are snapped onto the rear of the shoe, U.S. Patent No. 4,441,264 to Hantz-Guibas et al., in which the plastic heel guard snaps into the junction between the heel and body of the shoe, and U.S. Patent No. 4,459,764 to Beck, in which a slotted, generally U-shaped plastic guard snaps onto the shoe. U.S. Patent No.

4,794,705 to Sanders shows a heel guard that fits into the gap between the heel and body and has a clip that is inserted over the top of the rear of the shoe, with a strap optionally provided. U.S. Patent No. 4,750,278 to Cates shows a heel guard that is adhesively mounted onto the shoe.

5           Each of these prior designs suffers from one or more drawbacks that may explain their lack of success in the marketplace. The heel guard devices that must be strapped onto the shoe require cumbersome and uncomfortable movements, especially within the limited confines of the driver's seat of a vehicle. In addition, the strap itself may cause damage to the shoe. As to the rigid plastic devices that are biased onto the shoe, it is  
10 impossible to provide a structural design that is universally adaptable to different shoe designs. A rigid biased heel guard designed for men's shoes is unlikely to fit on women's shoes. Unless the biased guard is correctly designed, the act of attaching and removing the guard may in itself damage the shoe. The device is also cumbersome to store in the vehicle when not in use. The use of adhesive to mount the guard to the shoe,  
15 even though the adhesive is designed not to transfer to the shoe, is not a desirable solution, especially for expensive shoes. The adhesive will also wear out over time, and the use of disposable guards require that the user replenish the supply, as well as producing refuse after each use that must be properly disposed of.

          In contrast to these known devices, this invention is a heel protector guard device  
20 that is made of a soft flexible material having a peripheral elastic band that secures it to the shoe for easy installation and removal, such that the guard will correctly fit many different shoe designs and sizes, is re-usable and easily stored between uses.

It is a basic object of the device to provide a guard that protects the rear of a shoe so as to prevent the heel from rubbing and scrapping against the floorboard of an automobile and causing damage to the heel.

5 It is a further object of the invention that the device is made out of an elastic material that stretches and then conforms to wrap around the rear of the shoe, remaining in place without the aid of any sort of additional connector, fasteners or adhesives.

It is a further object of the invention that the guard is made in such a way to easily fit around the rear of any type of shoe, regardless of the size or even presence of the heel, in that the device may be used on shoes having flat soles, regular heels or extended heels.

10 These and other objects not expressly set forth will become apparent upon review of the following disclosure.

## Summary of the Invention

This invention is a device used to protect the rearward portion of a shoe that makes contact with the floorboard of an automobile while driving, including the rear portion of the sole and/or the heel, as well as the back of the upper shoe. The body of the invention is made of a flexible and preferably elastic material of sufficient thickness and durability to resist tearing, such as an expanded polymer foam or rubber. The body has a generally flat bottom and a curving wall with an open front to receive the heel and rear portion of a shoe. A circular elastic member is disposed about the periphery of the open front to temporarily secure the guard to the shoe, and has the capability and advantage of being easily stretched to fit over any type of shoe without the use of any connectors or adhesives. Reinforcement pads or plates may be attached to the body at the primary wear locations. The bottom may be provided with an aperture to accommodate women's high heels of excessive length.

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## **Brief Description of the Drawings**

Figure 1 is a perspective view of the heel guard device shown as removed from the shoe, showing an optional high heel aperture.

5        Figure 2 is a side view of the device removed from the shoe.

Figure 3 is a side view of the heel guard device shown while in use on a flat-heeled shoe and while the driver's foot is on the vehicle pedal.

Figure 4 is a side view of the heel guard device shown while in use on a woman's heel or pump-like shoe and while the driver's foot is on the vehicle pedal.

10       Figure 5 is a rear view of the heel guard device on a right shoe, showing an optional protective pad positioned to the outer side of the heel guard device and shoe.

## Detailed Description of the Invention

With reference to the drawings, the invention will now be described in detail with regard for the best mode and the preferred embodiment. In general, the invention is a shoe heel protective guard, cover or device that is designed and adapted to be self-retained in a temporary manner on the rear or back of a shoe in order to protect the shoe from scuffing, scratching, marring and other physical damage while the wearer is driving a vehicle. In this disclosure, the term heel area shall be taken to mean the rear portion of the sole and/or heel member, as well as the back portion of the upper shoe itself.

The body 11 of the heel guard or shoe protective device 10 is made of a material that is flexible and most preferably elastic in nature and is of adequate size to cover the rear heel area of a shoe 99. The body 11 of the invention may be comprised of many different types of flexible materials known in the art, but is preferably composed of a rubber, rubber-like or expanded polymer foam material, such as neoprene or similar type elastic fabrics. The heel guard 10 further comprises a bottom member 17, preferably formed of the same material as the body 11, but which may be formed of a non-elastic material for increased durability. The body 11 and bottom member 17 may also be coated or laminated with a clear or colored elastic for added stain and wear resistance.

As shown best in Figure 1, the heel guard 10 is preferably constructed to have a generally rounded, pyramidal, or cup-like shape, but may be of any other shape sufficient to provide the heel protecting function of the device within the functionality and parameters of this disclosure. In the preferred embodiment shown, the bottom member 17 is structured to be substantially planar and to have a generally linear forward edge and a rounded rear edge, similar in configuration to the bottom of a typical heel 98 found on a

men's shoe 99. The lower portion of the body 11 is connected to the bottom member 17. A relatively large opening 12 is disposed in the forward portion of the body 11. The side wall of the main body terminates generally at an apex or ridge member 16 just rearward and adjacent the rear of said opening 12. The perimeter of the opening 12 is hemmed or banded with an elastic hem member 13 in the form of a strip, cord or the like, such that the opening 12 may be stretched in any direction simultaneously.

The heel guard protective device 10 may be provided with additional elements to increase durability or usefulness. As seen in Figures 2 and 5, reinforcing members 14 comprising protective pads, plates, strips or the like, may be attached either to the bottom member 17 and/or on the lower portion of the body 11, these being locations where the majority of wear on the device will be concentrated. The reinforcing members 14 may be elastic but are preferably composed of a non-elastic material, either non-rigid or rigid, in order to increase durability.

For better applicability to women's shoes having extremely elongated heels, the heel guard 10 may also be provided with a high heel aperture 15 disposed in the bottom member 17, as shown in Figures 1 and 4. The aperture 15 may also be hemmed with an elastic member 16 to increase durability and retention properties.

The heel guard 10 is easily employed and is adapted by its configuration to fit a variety of sizes and shapes of shoes 99. The shoe 99 may take on any number of different forms including, but not limited to, boots, loafers, sneakers, running shoes or women's heels. The heel guard 10 can be utilized with these various types of footwear articles without modification of the protector device. The heel guard 10 is pulled up over the heel 98 (if present) and back portion of the shoe 99, such that the back portion of the



shoe 99 is protected from scuffing or damage by placing the opening 12 at the rear of the shoe 99, expanding the elastic hem member 13 and positioning it to the front of the heel 98 and adjacent to or over the top of the rear of the shoe 99, preferably with the apex 16 disposed across the rear of the shoe opening, and then releasing the elastic hem member 13 so that the heel guard 10 is attached to the shoe 99, as shown in Figure 3. For a "heel-less" shoe 99, such as a sneaker, tennis shoe, running shoe or the like, the elastic hem member 13 alone will maintain the guard 10 in proper disposition on the sole of the shoe 99. When one arrives at his or her destination, the heel guard 10 may be easily removed by gently pulling on the closed end of the guard 10 prior to the person exiting the vehicle. The heel guard 10 can then be discreetly stored in the dash of the automobile or easily put into one's pocket or purse and stored for later use.

For high heeled shoes 99 with extended heels, as shown in Figure 4, the apertured embodiment is preferred, since the length of the heel 98 may exceed the elasticity of the device 10. The heel guard 10 is pulled over the high heel 98 with the high heel 98 extending through the heel aperture 15 so as to be left exposed while the back portion of the shoe 99 is covered with the body 11 of the heel guard 10.

It is understood that equivalents and substitutions for certain elements set forth above may be obvious to those skilled in the art, and therefore the true scope and definition of the invention is to be as set forth in the following claims.